

PEDIATRICS

UNDER THE CHARGE OF

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The Schick Test in an Orphan Asylum.—STEARNS S. BULLEN (*New York State Jour. Med.*, 1916, xvi, 208) reports the results of the Schick test on 132 normal, healthy children at the Rochester Orphan Asylum. Of this number, 100 were again tested one year later. On both occasions the toxin was diluted with normal saline solution, so that the required amount ($\frac{1}{30}$ minimum lethal dose for the guinea-pig) was contained in 2 c.c. The children averaged from two to seventeen years in age. The injections were attended with practically no pain or distress. On both tests practically 55 per cent. of the children gave a negative reaction, showing that they had sufficient natural antitoxin in their tissues to neutralize the toxin injected, that is, at least $\frac{1}{30}$ unit per cubic centimeter of serum, sufficient to protect against diphtheria. Immunization was attempted on 41 children, with strongly positive reactions, by injecting subcutaneously, on two occasions with a four-day interval, $\frac{1}{2}$ c.c. of a toxin-antitoxin mixture. Of this number 35 still remained in the asylum eleven months later, and on being again tested still gave strongly positive reactions, showing they had developed little if any antitoxin as a result of the treatment. Eighteen children who gave positive reactions in May, 1914, showed no reaction in April, 1915. Fifteen children who gave no reaction at the first test showed more or less strongly marked reaction at the second test. Positive or negative results with this test do not give us data which remain the same for an indefinite period of time, one or two months at the outside being the limit. The test, which should be repeated at least once a month during an epidemic, in conjunction with the singling out of "carriers" by throat culture, allows epidemics in institutions to be controlled at about half the expense for antitoxin and with much less discomfort to the children.

Nephritis without Albuminuria.—J. PORTER PARKINSON (*Brit. Jour. Child. Dis.*, 1916, xiii, 138) reports a case of pneumonia in a boy, aged three and one-half years, which was followed by all the signs and evidences of nephritis, except that no albumin could be found in the urine at any time. Seven days after an uneventful recovery from the pneumonia he developed extreme swelling of the face, arms, hands, feet, legs, and the wall of the trunk. There was no sign of fluid in the chest or abdomen. Daily examination of the urine showed no albumin, but a few hyaline and granular casts and an occasional red corpuscle. The daily amount of urine was normal and contained fairly abundant urates. The blood-pressure was 90 mm. After four days of hot-air baths and purgatives the edema began to disappear, and in ten days all casts and blood had disappeared from the urine, and a week later

the case was discharged as cured. The author believes the case to have been one of acute nephritis without albuminuria, but not probably induced by the pneumococcus which usually shows severe hematuria and abundant organisms in the urine which were absent in this case. The majority of cases of nephritis with edema and without albuminuria seem to be a result of scarlet fever, but in this case there was only an acute pneumonia. The absence of albumin in such cases causes many of them to be overlooked in the absence of careful microscopic examination. From the reports of Ballico, Herbert and others, cases showing casts and erythrocytes and no albumin may show no other signs of nephritis or may show only headache, pallor and fatigue. The author calls attention to the report of Philippe, in 1864, who claimed 60 cases of scarlatinal nephritis in which no albumin appeared; and the thesis of F. Leonetti, 1914, who reported a number of cases of nephritis in English soldiers with all the clinical signs except albuminuria.

Factors in the Incidence and Fatality of Measles.—J. G. WILSON (*Arch. Pediat.*, 1916, xxxiii, 261), from a study of statistics, shows that the mortality from measles is less than was considered correct some years ago. In New York City, in 1913, the mortality rate was 2.15 per 100, and in 1914 the rate for 28 States and Territories was 1.73 per cent., so that at present the case mortality rate of measles throughout the United States is less than 2 per cent. This, however, represents the low-water mark of measles mortality, as indicated by the mortality statistics compiled by a large insurance company two years ago, which showed a much higher mortality than has prevailed since the compilation was made. The mortality rate in measles is almost uniformly higher in institutions than in private practice and runs from 13 per cent. to 30 per cent. in large institutions generally. The Contagious Disease Hospital at Ellis Island showed a mortality from measles of less than 10 per cent. before the war, and for the last three months only 8.5 per cent. It is evident, therefore, that the disease has no fixed mortality rate, due probably to some as yet undetermined factor. A regular, periodical recurrence of measles epidemics has been noted in many cities, the time interval being about two years in New York City. The theory of the successive susceptible crops of individuals will not explain the periodicity of epidemics which is shown to vary in different places. Only one factor seems to bear a causal relation, and that is overcrowding. Suppurative otitis media, bronchopneumonia, and cross-infection are noted as the most important complications. Data are taken from the hospital at Ellis Island, and cover 2000 cases of measles. During a period of three years measles was four times as frequent as all the other contagious diseases combined. The influence of season on the development of bronchopneumonia seems small. Generally speaking every recovery from measles and bronchopneumonia is balanced by a death from measles with some other complication.

The Wassermann Reaction in Mental Deficiency in Children.—ALFRED GORDON (*Arch. Pediat.*, 1916, xxxiii, 273), in a study of 78 cases presenting mental defects of varying degrees, makes the following points as regards hereditary syphilis: Even in the absence of all external evidences in child and parents, every case of mental abnormality in

children should be investigated from the stand-point of hereditary syphilis. When hereditary syphilis causes extensive deformities or actual malformations of the central nervous system or other organs therapeutic endeavors are baseless and in vain. But when there is only feeble-mindedness of various degrees, and when this is associated with epilepsy, tremors or choreiform movements, or frequent and persistent headaches or where there are neurotic phenomena such as outbreaks of anger, of violence or tendency to vicious habits, then encouraging results may be obtained from methods based on the newer serologic investigations. In the series of 78 cases comprising imbeciles, idiots and feeble-minded with epilepsy, petit mal, headaches and those without functional or organic disorders the Wassermann test showed that 50 per cent. presented a positive reaction. While syphilis causes permanently defective offspring it also causes mental deficiency which is amenable to improvement. The detection of such recoverable cases is of paramount value. A negative Wassermann result should be followed by repeated tests at intervals. A positive result should be followed by vigorous and prolonged treatment by antisyphilitic remedies. Children up to the age of five were given mercurials and iodids. From that age on the treatment commenced with neosalvarsan, then continued with mercury and the iodids. The intraspinal method of salvarsanized serum was used exclusively on children of fifteen and sixteen years and supplemented by mercury and iodids. Mercury was given exclusively by inunction. The cases with organic changes were unresponsive. The feeble-minded showed decided improvement, in some, epileptic attacks diminished or ceased, those with petit mal especially showed improvement and the mentality in all these functional conditions showed striking improvement. The most striking improvement was in the feeble-minded with no functional disturbance.

GYNECOLOGY

UNDER THE CHARGE OF

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Ultraviolet Rays in the Treatment of Pelvic Inflammation.—A few months ago we discussed in this department some work done by Fromme, of Berlin, in the treatment of chronic pelvic inflammatory conditions by means of ultraviolet light from the mercury vapor lamp. A recent report of similar work carried on in New York has recently been published by HELLMAN (*Am. Jour. Obst.*, 1916, lxxiii, 662), a former pupil of Fromme. The technic was apparently identical: the apparatus used is the "künstliche Hohensonnelampe" designed by Bach and Nagelschmidt; the source of light is a "transparent quartz tube, $\frac{1}{2}$ cm. long, on the ends of which are two transverse